

## **REMARKS**

### **Summary**

This Amendment is responsive to the Office Action mailed on August 25, 2004. Claims 1, 2, 3, 5, 7-14, 17, 18, 23, 24, 27, 30-33, and 36-38 are amended. Claims 39-41 are new. Claims 1-41 are pending in the application.

The Examiner has indicated that claims 8-27, 29-32, 35, 37 and 38 contain allowable subject matter.

Claims 8-27, 35, 37 and 38 were rejected under 35 U.S.C. §112, 2<sup>nd</sup> paragraph as being indefinite. Particularly, examiner indicated that the terms x-slide, z-slide, x-guide, and z-guide lack sufficient antecedent basis. The claims are amended to overcome the 35 U.S.C. § 112 rejections. Withdrawal of the rejections under 35 U.S.C. §112 is respectfully requested.

Claims 1, 2, 3, 28 and 36 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hiroshi et al. (US Patent No. 5,157,824) in view of Hirose et al. (US Patent No. 6,626,075 B2).

Applicant respectfully traverses these rejections in view of the amended claims and the following comments.

### **Discussion of Amended Claims**

Claim 1 is amended to more particularly describe the subject matter of the present invention. In particular, claim 1 is amended to specify that the spindle housing carriers extend laterally away for the respective spindle housings parallel to a first lateral direction. Claim 1 is also amended to specify that the tool carriers and the respective spindle housing carriers are arranged on opposite sides of the corresponding spindle axis.

Claims 2 and 13 are amended into independent form by incorporating the subject matter of original claim 1, without the first and second tool carriers. New claim 39 depends from claim 13, and adds the first and second tool carriers, with related structure. As the Examiner has indicated that claim 13 contains allowable subject matter, Applicant submits that claims 13 and 39 (as well as the claims dependent thereon) are now in condition for allowance.

Claim 33 is amended into independent form and is based on a combination of original claims 1 and 33. Claim 37 is amended into independent form and is based on a combination of original claims 1 and 37. As the Examiner has indicated that claim 37 contains allowable subject matter, Applicant submits that claim 37 is now in condition for allowance.

New claim 40 is similar to amended claim 33, but without the first and second tool carriers. New claim 41 is similar to amended claim 33, without the first and second tool carriers. It is believed that these claims are in immediate condition for allowance.

Claims 3, 5, 7-12, 14, 17, 18, 23, 24, 27, 30-32, 36, and 38 are amended to either improve the readability of the claims, overcome the rejections under 35 U.S.C. § 112, or to conform the amendments made to claims 1, 2, 13, 33, and 37.

#### 35 U.S.C. § 103 Rejections

Claims 1, 2, 3, 28 and 36 stand rejected as being unpatentable over Hiroshi in view of Hirose. This rejection is respectfully traversed.

Applicant's amended independent Claim 1 now specifies a first spindle housing carrier extending laterally away from a first spindle housing parallel to a first lateral direction and a second spindle housing carrier extending laterally away from a second spindle housing parallel to said first lateral direction. This arrangement provides particular advantages in minimizing the space requirements and allowing the third tool carrier to operate over the maximum range, which advantages are not provided by Hiroshi. Applicant's claim 1 has been further amended by clarifying that the first and second spindle housing carriers and the respective first and second tool carriers are each arranged on approximately opposite sides of their respective spindle axis.

Hiroshi does not disclose or suggest these limitations. With Applicant's invention, as shown for example in Applicant's Figure 2, the spindle housing carriers 30 and 50 extend laterally away from the spindle housings 36 and 56. As can be seen from Figure 1 of Hiroshi, the spindle housing carriers (5, 6) do not extend laterally away from the respective spindle housings (5b, 6b), as claimed by applicant.

Applicant's invention as set forth in amended claim 1 further specifies that the respective first and second tool carriers and the respective first and second spindle housing carriers are arranged on opposite sides of the spindle axes. For example, the tool carriers 120 and 130, as shown in Applicant's Figure 1, are positioned above the spindle axis 42 and the spindle housing carriers 30, 50 are positioned below the spindle axis 42. Neither Hiroshi nor Hirose disclose or suggest locating the tool carrier and its respective spindle housing carrier on opposite sides of the spindle axis.

The Examiner relies on Hirose as disclosing a third tool carrier movable in the x-direction. Hirose does disclose a third tool carrier. However, Hirose does not disclose or remotely suggest that the third tool carrier 6 is provided between the spindle housing carriers of the first and second working spindles on a side of the spindle axes which is approximately opposite from the first and second tool carriers, as set forth in Applicant's amended claim 1. In Hirose, the spindle housing carriers do not extend to the same side of the respective spindle housings such that the third tool carrier can be arranged between them as claimed by Applicant in amended claim 1.

Applicant's Claim 2 specifies that a third tool carrier is disposed on an X slide, which is guided on an X slide base by X guides disposed in X guiding planes perpendicular to the spindle axes as shown in Figure 2. Mounting the third tool carrier as disclosed by Applicant on such an X slide base reduces the space required for the third tool carrier, allows the third tool carrier to extend closer to the spindle housing carrier, and contributes to the stability of the third tool carrier in the X direction. Neither Hiroshi nor Hirose disclose or suggest mounting the tool carrier slide base in such a way as to form an X-guiding plane perpendicular to the spindle axes. As can be seen from Hiroshi and Hirose, both references only disclose X-guide planes which are parallel to the spindle axis and consequently parallel to the Z-direction.

Amended claim 33 now specifies 4 tool carriers, in which the third and fourth tool carriers are movable with respect to an associated working spindle. Neither Hirose nor Hiroshi discloses an arrangement of third and fourth tool carriers as claimed by Applicant in amended claim 33.

As the proposed combination of the Hiroshi et al. reference with the Hirose et al. reference fails to teach or suggest all of the elements as set forth in Applicant's claims, there is no *prima facie* case of obviousness.

In view of the above, Applicant respectfully submits that the present invention is not anticipated by and would not have been obvious to one skilled in the art in view of the Hiroshi et al. reference, taken alone or in combination with Hirose or with any of the other prior art of record.

Further remarks regarding the asserted relationship between Applicant's claims and the prior art are not deemed necessary, in view of the amended claims and the foregoing discussion. Applicant's silence as to any of the Examiner's comments is not indicative of an acquiescence to the stated grounds of rejection.

Withdrawal of the rejections under 35 U.S.C. § 103(a) is therefore respectfully requested.

Conclusion

The Examiner is respectfully requested to reconsider this application, allow each of the pending claims and to pass this application on to an early issue. If there are any remaining issues that need to be addressed in order to place this application into condition for allowance, the Examiner is requested to telephone Applicant's undersigned attorney.

Respectfully submitted,



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